Continental J. Information Technology 4: 1 - 8, 2010 ISSN: 2141 - 4033
 http://www.wiloludjournal.com

THE USE OF WEB DIRECTORIES AS INGREDIENTS FOR ARCHITECTURAL RESEARCH IN NIGERIA

[1]Salami Rafiu Olugbenga and [2]Olaniyan-Abdusalam Monsurat Kehinde
[1]Department of Architectural Technology, Faculty of Environmental Studies, Rufus Giwa Polytechnic, Owo, [2]Department of Architecture, School of Environmental Technology, Federal University of Technology, Akure, Nigeria

ABSTRACT.
It is a well known fact that the progress in any discipline and profession is ultimately related to the quality and quantity of its engagement with the production of knowledge through research. By engaging in research, it can enhance design and ultimately broaden the scope of architectural practice in Nigeria. The impact of the information and communication technology in this direction is unprecedented. On the web today, there are millions of relevant information that can serve as ingredients for a good architectural research. This paper explores one of the major resources for locating vital materials on the internet, web directories. The search techniques, features and its benefits are analyzed. It offers numerous resources for e-books, e-journals; digital collections coupled virtual library and other valuable information. The paper advocates creation of versatile web portals that are heavily loaded with local content through collaboration with architectural educators and other stakeholders so as to accelerate a meaningful but effective research in architecture.

KEYWORDS: search engines, web directory, web portal, architectural research

INTRODUCTION

Globalization is the new bride of every academic discourse. Every discipline sees it as a common asset although it is understood from the specialized spectacles of the materials of academic concerns (Akpan, 2008). Architectural research in Nigeria is not left out, it has been affected greatly by the new Information and Computer Technology(ICT); in fact ICT is now an integral part of research. One of the most efficient ways of conducting research is to use the internet. An internet user has access to a wide variety of services such as electronic mail, file transfer, vast information resources, interest group membership, interactive collaboration, multimedia displays, real-time broadcasting, breaking news, shopping opportunities and much more. This paper therefore intends to explore the efficacy of web directories, its search strategies, traits and benefits. It also provides several resources for e-books, e-journal, digital collections and online sources for printed materials in architecture.

Architecture

Architecture is a discipline and a profession with its own unique body of knowledge and generally defined as art and science of design and erection of building. It manipulates space in order to provide physical objects to accommodate human activities, incorporating the wide varieties of activities and human users (Amole, 2004).

Research

Research is essentially a way of thinking; it is a manner of regarding accumulated fact so that a collection of data becomes articulate to the mind of the researchers in terms of what those data mean and what fact say. Osuala (1987) admits that it is the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis, and interpretation of knowledge, for promoting progress and for enabling man to relate more effectively to his environment, to accomplish his purpose, and to resolve his conflicts. Quintarina (2007) agrees that research is simply the manner in which men solve the knotty problems in their attempt to push back the frontiers of human ignorance.

Architectural research

Architectural research is therefore a research that focuses on the uniqueness of architecture as a discipline, and profession together with its body of knowledge, ideologies and practice. The aim of Architectural research is to conduct research in order to advance knowledge within the discipline by deploying universally valid research approaches and methods to address the concerns in Architecture.

Conducting Research on the Internet

There are four basic types of search tools on the internet;

(i) Search engines.
(ii) Web indices.
(iii) Web directories.
(iv) "Deep" or "invisible" web.

As illustrated in Fig. 1 they are useful for different types of queries. It is very important for searchers to know their differences.

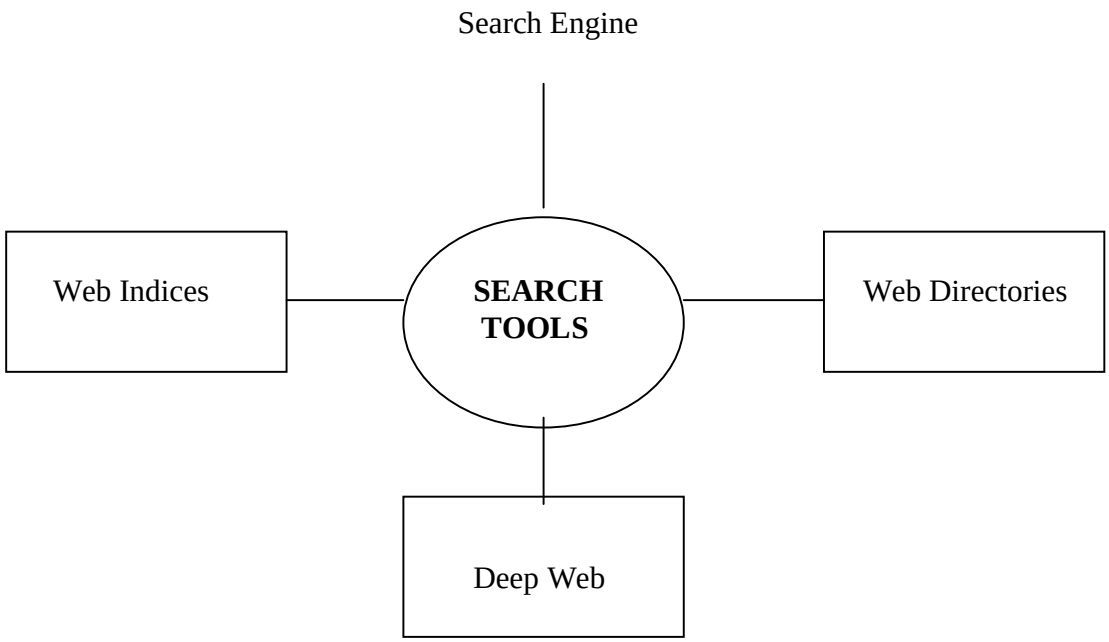

Fig 1: Four basic types of search tools

(i) *Search engines:* These are primarily first generation services that have been around for quite a while. Search engine is a software tool that crawls the web searching for information (Ogunsote *et al*, 2003). These are searchable database of internet files collected by a computer program called a wanderer, robot, spider or crawler. Google is famous example of search engine.

(ii) *Web indices*: An index contains a copy of each web page gathered by the spider. It is a listing of the contents of the web, usually in a particular category (Ogunsote *et al*, 2003)

(iii) *Web directories:* A web or link or subject directories are defined as categorized topics of collections of information organized into a tree like structure where categories are used to define each groups association (http://www.small-business-software.net/web-directory.htm).Directories, unlike search engines, are compiled manually using real live humans. These "humans" select sites to be added to the directory, rather than software programs.

(iv) *Deep or invisible web:* The deep web consists of information stored in searchable databases mounted on the web. It is only accessible by user query. These databases usually search a targeted topic or aspect of a topic,

though entire web sites may be contained within a database. Search engine spiders cannot or will not index this information. Information that is dynamically changing in content will appear on the invisible web. Examples include news, job postings, available airline flights; etc.Completeplanet.com is a good example of deep web.

How web directories work

Web directories are usually much smaller than search engines databases, since the sites are looked at by human eyes instead of spiders or software. The searchers works at sites organized in a series of categories menus. There are two ways for sites to be included in a web directory's listings either the site owner can submit the site to the web directory or the directory's editor(s) will eventually come across that site.

Table 1: *Selected general web directories.*

Web directories	Address	Comment
Open Directory Project (a.k.a dmoz or ODP)	www: dmoz.org	The largest directory constructed and maintained by a "vast, global community of volunteer editors".
Look smart	www.looksmart.com	A web directory with its recent foray into vertical search channel
Web directories	Address	Comment
Yahoo directory	www.yahoo.com	One of the beet directories on the web along with its own search engine listings and many other search services.
Ansearch	www.ansearch.com	Web search and directories focusing on the US, UK, Australia & New Zealand.
Best of the web directory	www.botw.org	List content rich well designed website categorized both by topic and by region
Google	Directory.google.com	Use hierarchical subject organization to locate sites on a topic. Narrow down web searches with too many results. see Fig.3

(*Source: Internet search)*

Table 2: Selected Academic & professional directories

Web directories	Address	Comment
Academic info	www.academicinfo.net	Gateway to college and research level internet resources maintained by former librarian Mike Madin and a volunteer group of subject specialist.
INFOMINE	http:infomine.ucr.edu	Large collection of scholarly internet resources collectively maintained by several libraries e.g. University of California. See Fig.2
The internet public library	www.ipl.org/div/books	Large selective collection from the University of Michigan.
Intute	www.intute.ac.uk	UK based collection of resources of education and research.
The www virtual library	www.vlib.org	Guides to many disciplines sponsored by the W3
Librarians internet index	www.lii.org	Carefully chosen, organized and annotated directory maintained by large group of librarians in California.

(Source: Wikipedia (2008) and internet search.)

How to search a web Directory

(i) The searcher types a query into the web directory, or searches the web directory is indexed categories.

(ii) The web directory matches the searcher's query with relevant data from its index.

Types of web directories

Web directories come in all shapes and sizes; some are generic, while others are highly specialized as shown in Tables 1, 2, 3&4. There are basically two types of directories;

(i) *Academic and professional directories:* created and maintained by subject experts or librarians to support the needs of researchers and tend to be associated with libraries and institutions. These collections are created in order to enhance the research process and help users find high quality sites of interest. A careful selection process is applied, and links to the selected resources are usually annotated. As a rule, these sites do not generate income or carry advertisment.Example: The Argus clearing house consists of highly selective subject guides that are often compiled by expert; the guides are themselves evaluated by the clearing house staff.(http://www.stfrancis.edu/cid/docs/saerch)

(ii) *Commercial portals directories:* These cater for general public and usually competing for traffic. They are created to generate income and serve the public. These services contain directories that link to a wide range of topics and often emphasize entertainment, commerce, hobbies, sports, travel and interests not necessarily covered by academics directories. Yahoo is the most example of a commercial portal. Researcher should use appropriate directory to meet his needs.

Fig.2: *Showing a homepage of INFOMINE Directory*
(*Source:* http:infomine.ucr.edu)

Fig.3: *Showing a homepage of Google Directory*
(*Source:* directory.google.com)

Table 3: Selected specialist Web directory

Web directory	Website	Comment
Business.com	www.business.com	Business directory which charge a fee for review as a pay per chick search engine.
V funk	www.v-funk.com	Specializes in listing and categorizing global dance music and urban life style listings.

(*Source*: Wikipedia (2008) and internet search.)

Table 4: Selected commercial & portal directories

Web directory	Website	Comment
About	www.about.com	Large collection of topical collections gathered by company-certified subject specialists.
Joeant	www.joeant.com	Guide compiled by volunteers, listings include information about each site including multimedia,features,chat,e-commerce,access limitations etc.
Jumpcity	www.jumpcity.com	A collection that offers a signed review of each item and a link to any Usenet newsgroup related to the topic.
WebBrain	www.webbrain.com	Java-based visual search engine of the Open Directory Project index; interface allows users to click through an animated display of categories to locate Web sites.

(*Source:* internet search)

The search techniques.
Many researchers do not make enough use of directories but instead go straight to search engines. For targeted, multi-concept, and sometimes general queries search engine is advisable. But for research oriented queries involving an exploration of a topic, web or subject directory is highly recommended.

5.1 Online books
Dot-coms, dot-orgs and dots-edus have become interested in offering free search of the world's literature as found in books and scholarly materials once results are found, searchers can access the material based on its copyright status. Materials out of copyright are generally fully available for viewing and printing, while only snippets of text or abstracts are available for copyrighted works. A good example of several sources of digital books on the web can be accessed freely on archnet.org, architectureasia.com. These are online community for architects, planners, urban designers, interior designer with special focus on the Islamic world. Publications can be downloaded with ease from the sites. Two notable sites for books search are Amazon and Google books search. Scholarly materials in the form of electronic journals and other similar works are also becoming available to be freely searched as shown in Table 5. These include Google scholar and Windows Live search Academic.

Table 5: Selected Electronic Journals

Periodical	Web address	Comment
Architecture	www.lib.berkeley.edu/ENVI/ architecture.html	The environmental design library of the university of Berkeley.
Electronic Journals and magazines.	www.usg.edu/galileo/internet/electronic/elecjour.html.	An index of electronic journals and texts, including architecture journals.
Architecture Journal	www.lib.strath.ac.uk/engweb/archej.html.	A University of Strathclyde list of electronic journals of relevance to architecture available via the library catalogue.
Architecture designed houses	www.archmedia.com	Architects designed houses showcases domestic architecture by selected Australian architects. Architect designed houses features houses and renovations to suit a variety of styles and budgets.
ArchNet-IJAR	www.archnet.org	The new online journal of architecture and urbanism-International Journal of Architectural Research(IJAR)
RIBA Journal	www.ribajournal.com/index.asp	This is the popular Journal of Royal Institute of British Architects(RIBA)

(*Source:* internet search)

Online libraries
These contain online collections of unique materials to support the needs of advance and highly specialized scholarship (Encarta, 2008). There are several public, federal and university libraries on the web that feature online catalogues and digital collections as shown in Tables 6-7.

Table 6: selected university libraries

Library	Web address
Harvard University library	www.hacl.harvard.edu
MIT library	www.libraries.mit.edu
Princeton University library	www.infoshare1.princeton.edu
Yale University library	www.library.yale.edu
Louisiana State University	www.lib.lsu.edu/weblio.html

(*Source: Ogunsote et al 2003 and Internet search*.)

Table 7: Selected public and federal libraries

Library	Web address
Chicago Public Library	www.chipublib.org.
Library of Congress	www.leweb.loc.gov.
New York Public Library	www.nypl.org
Philadelphia Free Library	www.library.phila.gov

(*Source: Ogunsote et al 2003 and Internet search*.)

MIT Open Course Ware (OCW)

The MIT OCW allows people all over the world to tap into the reserves of knowledge from major institution around the globe (Festa, 2003). It is a free and Open Educational Resource (OER) for educators, students, and self-learners around the world. And publications of more than 1550 of MIT course which does not require any registration. (Massachusetts Institute of Technology, 2008).

Web portal.

A web portal is a site that provides a single function via a web page or site. It often functions as a point of access to information on World Wide Web (Wikipedia, 2008). It is a website that acts as a gateway to a type of product, an activity, a profession, a business process, an industry, or any one of a multitude of subjects. These are places where people go to get information, and even to chat, send email, shop online and form online communities (Ogunsote et al, 2007). ArchNetNG is a good example of a web portal, though still very much in its infancy, it is highly commendable and encouragements should be given to the architect of this premier web portal for Nigerian Architects. It is an online community for the Nigerian architects, planners, urban designer, and landscape architects and for every thing that is Nigerian architecture.

CONCLUSION AND RECOMMENDATIONS

There is no iota of doubt that architecture is a unique discipline and architectural researchers in Nigeria need to experiment the various search tools and techniques so as to equip themselves with reliable information related to architecture globally. It can be accelerated by creating several web portals in the Nigeria context through collaborative effort of NIA, ARCON and other stakeholders.

REFERENCES

Akpan, (2008): Globalization and the challenges of communication technology to the public Relations in Nigeria. Uyo Journal of Humanities; vol. 9 pg 16-44.

Amole B, (2004). Architectural Research: An introduction. A Monograph of the Association of Architectural Educators in Nigeria (AARCHES) No 1 pg. 7-20.

Encarta, (2008). Microsoft student with Encarta premium 2008 DVD.

Festa, P, (2003). MIT for free, virtually. CNETNews.com. Available from: http//news.com./2100010250508384O.html [Accessed to March 2nd 2008].

Massachusetts Institute of Technology, (2008).MIT Open Course Ware. Available from: http://ocw.mit.edu/index.html [Accessed March 2nd 2008].

Ogunsote.O.O.*et al* (2003). The use of search Engines, web directories and indices on the World Wide Web for Architectural Research in Nigeria. Presented at year 2003 Annual General Meeting and Conference of Association of Architectural Educators in Nigeria (AARCHES).

Ogunsote.O.O.*et al* (2007).ArchNET: Draft Concept and Specifications Premier Web Portal Nigerian Architecture, Paper Presented at the 2007Annual Conference of the Association of Architectural Educators in Nigeria (AARCHES).

Osuala, E.C (1987). Introduction to Research Methodology, second edition Africana-FEP Publishers Limited, Onitsha, Nigeria.

Quintarina, U (2007). Research in urban Designer. Web page retrieved from http: /online.trisakti.ac.ic /news / jurlemlit /9quinoo.htm. [Accessed March 2008]

Wikipedia (2008).Web Portal. Available from http://en.wikipedia.org/wiki/Web_portal. [Accessed March 2008].

Received for Publication: 18/09 /2009
Accepted for Publication: 02/05 /2010

Corresponding Author:
Salami Rafiu Olugbenga
Department of Architectural Technology, Faculty of Environmental Studies, Rufus Giwa Polytechnic, Owo,